

Roll No. ....

**D-3291**

**B. A. (Part III) EXAMINATION, 2020**

MATHEMATICS

**(Optional)**

Paper Third (A)

**(Principles of Computer Science)**

*Time : Three Hours ]*

*[ Maximum Marks : 50*

**Note :** Attempt *one* part from each Unit. All questions carry equal marks.

**Unit—I**

1. What is computer peripheral communication ? Explain any *two* input and *two* output devices.

*Or*

Write short notes on the following :

- (i) Mass storage
- (ii) Binary system

**Unit—II**

2. What is Operating System ? Explain the architecture of operating system.

*Or*

Define software engineering and explain its developmental tools and technique.

**(B-10) P. T. O.**

**[ 2 ]**

**Unit—III**

3. Define algorithm. Write algorithm to check inserted no. is even or odd.

*Or*

Explain parallel computing and declarative computing.

**Unit—IV**

4. Explain stack and queues. Describe PUSH and POP operation of stack.

*Or*

What is file ? Explain sequential and indexed file.

**Unit—V**

5. Explain computable and non-computable function.

*Or*

Write short notes on the following :

- (i) Image analysis
- (ii) Artificial Neural Networks

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